

**REMARKS**

The Official Action mailed December 14, 2004, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to April 14, 2004. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on June 2, 1999, March 31, 2000, June 21, 2000, July 30, 2001, February 15, 2002, April 18, 2002, October 28, 2002, November 21, 2002, January 3, 2003, July 1, 2003, December 16, 2003, and September 22, 2004.

Applicant's appreciate the Examiner's time in conducting a personal interview with the undersigned on April 5, 2005. During the interview, the amendments and support therefore, as described in more detail below, were discussed. It was agreed that the Examiner would further consider the subject application in view of these amendments and remarks.

Paragraph 2 of the Official Action objects to the drawings under 37 CFR 1.83(a) asserting that "the pixel electrode is connected to said thin film transistor via said conductive film (claim 9); and a pixel circuit, driving circuit, and an n-channel thin film transistor and at least a p-channel thin film transistor in said driver circuit (claim 45)" are not shown in the drawings (page 2, Paper No. 20041208). The Applicants respectfully disagree. With respect to claim 9, the Applicants respectfully submit that the claimed features are shown in Figure 8F, i.e. pixel electrode 37 is connected to a thin film transistor via conductive film 36b. The specification, on page 17, lines 15-25 describe this structure, including the formation of electrodes 36b and pixel electrode 37 made of a transparent conductive material such as indium tin oxide (ITO). With respect to claim 45, the features of "a pixel circuit and a driving circuit" have been deleted and thus this rejection is moot. Reconsideration and withdrawal of the objections are requested.

Paragraph 3 of the Official Action objects to claims 5, 8, 14, 17, 25, 30, 38, 43, 56 and 72 noting that "it appears the limitation 'interlayer insulating film' is referring to the insulating film in claim 1" (page 3, Paper No. 20041208). That is, it appears that the Official Action is concerned with antecedent basis for "interlayer insulating film." In response, the Applicants have amended claims 5, 8, 14, 17, 25, 30, 38, 43, 56 and 72 to recite "said insulating film," which is consistent with their respective independent claims. Reconsideration and withdrawal of the objections are requested.

Paragraphs 5 and 7 of the Official Action reject claims 1-80 as obvious based on the combination of U.S. Patent No. 5,250,931 to Misawa et al., U.S. Patent No. 4,735,908 to Higashi et al., and U.S. Patent No. 4,581,620 to Yamazaki et al., either alone or in combination with U.S. Patent No. 5,153,142 to Hsieh. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

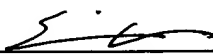
The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 1, 10, 19, 32, 45 and 68 have been amended to recite an underlying insulating film formed on a substrate, a pixel circuit and a driving circuit (or at least an n-channel thin film transistor and at least a p-channel thin film transistor) formed on the underlying insulating film, where the underlying insulating film contains halogen. This feature is supported by film 32 shown in Figure 8A, for example, and described on at least page 11, lines 2-7 and page 27, lines 30-34 of the specification. As noted during the interview, the inclusion of a halogen in the underlying insulating film is effective, for example, to prevent impurities in the substrate from reaching the semiconductor film.

Misawa is relied upon to allegedly teach an AMLCD, a pixel circuit, a driving circuit, and a TFT (pages 3-4, Paper No. 20041208). Higashi is relied upon to allegedly teach an inorganic insulating film 5 and an organic insulating film 7 (page 4, Id.). Yamazaki is relied upon to allegedly teach a semi-amorphous semiconductor layer (Id.). Hsieh is relied upon to allegedly teach a thin film transistor comprising an ITO pixel electrode 44 and metal layer (conductive layer) 40 (page 8, Id.). However, Misawa, Higashi, Yamazaki and Hsieh, either alone or in combination, do not teach or suggest at least an underlying insulating film formed on a substrate, a pixel circuit and a driving circuit (or at least an n-channel thin film transistor and at least a p-channel thin film transistor) formed on the underlying insulating film, where the underlying insulating film contains halogen.

Since Misawa, Higashi, Yamazaki and Hsieh do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

  
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